Abstract Title Page

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Title: The What Works Clearinghouse: New Strategies to Support Non-researchers in Using Rigorous Research in Education Decision-Making

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Abstract Body

Limit 4 pages single-spaced.

Background / Context:

Description of prior research and its intellectual context.

Practitioner and policy makers need access to research information that is easy to comprehend and act upon in order to make evidence-based decisions that will likely result in improved student achievement. The What Works Clearinghouse (WWC) is a central and trusted source of information of scientific evidence for what works in education. Towards that end, the WWC summarizes research on a range of practices, programs, and policies (interventions) and disseminates that research in a variety of forms on the free public website. In recent years, the WWC has expanded its scope to include research on postsecondary education, interventions for teachers, and additional special education populations. The WWC has also focused its work on expanding resources to support a range of audiences in accessing, understanding, and applying research. New products, easy-to-use databases, and enhanced communication activities provide these much-needed supports for non-researchers. For example, the WWC has introduced several standards briefs, which each provide a detailed explanation of a WWC standard, such as attrition. The WWC also maintains databases to help users locate research studies or compare the demonstrated effectiveness of interventions on various outcomes, in various settings, and for different populations. In addition to supporting non-researchers in identifying appropriate interventions for their districts, schools, and classrooms, the WWC serves as a resource for researchers on how to conduct and report findings from high-quality research and on what topics rigorous research is particularly needed.

Purpose / Objective / Research Question / Focus of Study:

Description of the focus of the research.

The WWC has engaged in a variety of activities during the past two years to communicate findings of rigorous research to a wide audience in clear and engaging ways. The panel will present a sample of these efforts and solicit feedback from audience members on how to further the WWC's work to support practitioners and policy makers in using rigorous research in educational decision-making. For each activity, one of the panelists will present the tool, describe the tool's purpose and intended audience, convey feedback received to-date on the tool's utility, and then facilitate a brief discussion with the audience about how to improve the tool and what supplemental resources, if any, are needed. These tools may include:

- **Standards briefs.** WWC Standards Briefs explain the standards (or rules) the WWC uses to assess the quality of studies. The briefs use accessible language and graphics to explain the standard and why studies meeting that standard have stronger causal validity than those that do not.
- **Find What Works**. Find What Works is a searchable database of intervention reports. Users can filter the database on a variety of characteristics unique to the users' specific needs to identify interventions meeting those criteria on which the WWC has reviewed existing research and published an intervention report. The results display the list of intervention reports meeting the selected criteria and the average effects of the intervention shown in rigorous research. For example, a principal can use the database to

- identify interventions that have been shown to improve math achievement for 5th graders. <Figure 1. Find What Works results for 5th grade math achievement>
- Supplemental materials for practice guides. WWC practice guides are popular resources for practitioners seeking low-cost actionable recommendations to address common challenges, such as writing or algebra instruction. However, practitioners might not always grasp the nuances of the levels of evidence assigned to the recommendations within the guide. To support their understanding, the WWC developed a short video describing the levels of evidence assigned to the recommendations in a recent practice guide and what each level of evidence conveys about the rigor of the research on which a recommendation is based, the generalizability of the findings of that research, and the panels' confidence that the recommended practices will improve achievement.

Setting:

Description of the research location. (May not be applicable for Methods submissions)

Not applicable.

Population / Participants / Subjects:

Description of the participants in the study: who, how many, key features, or characteristics. (May not be applicable for Methods submissions)

The WWC reviews research on early childhood education, K-12 education, post-secondary education, and teacher-based interventions. Most research is conducted within the United States, though some WWC review protocols include research conducted in international settings, as appropriate.

Intervention / Program / Practice:

Description of the intervention, program, or practice, including details of administration and duration. (May not be applicable for Methods submissions)

Not applicable.

Significance / Novelty of study:

Description of what is missing in previous work and the contribution the study makes.

Non-researchers making evidence-based decisions need to be able to access and understand the research findings. Since 2002, the WWC has filled the void between research and practice by serving as a central source of information on the findings of rigorous research. The WWC is extending this work further by developing additional tools through which to present the results of WWC literature reviews. The WWC is also developing resources to educate non-researchers about research and support them in integrating research results into their practice.

Statistical, Measurement, or Econometric Model:

Description of the proposed new methods or novel applications of existing methods.

The presentation will not describe new statistical, measurement, or econometric models. Instead, and in keeping with the theme of the conference, it will describe new methods for

communicating research information to practitioners and policymakers. The WWC has traditionally summarized research findings in intervention reports, single study reviews, and practice guides. These three core products reflect a deep understanding that one of the primary obstacles policy makers' and practitioners' use of research is their capacity to identify and locate rigorous research and to digest the information contained within. Within each, the WWC employs a WWC-developed rating scale to report the demonstrated effectiveness of the given intervention and provides a narrative description of the research quality and other key characteristics, including sample composition.

The WWC's recent efforts extend this work by creating tools to help diverse audiences understand why it is important to consider research's rigor and what differentiates rigorous research from non-rigorous research; combining and presenting research findings in a way that is more accessible; and encouraging discussions about how to integrate research knowledge gleaned through the WWC into practice. Throughout, the WWC also strives to present information in multiple media formats to accommodate diverse learning styles, technical knowledge, and time constraints. To explain the WWC design standards and how rigorous research informs products, the WWC has delivered webinars, produced briefs, and filmed videos. To make products more accessible, the WWC has developed databases, simplified the language in core products, and introduced supplemental products, such as practice guide summaries. And to create a stronger dialog around how to use research evidence from the WWC in decision-making, the WWC has delivered webinars, produced short videos, and collected external feedback.

Usefulness / Applicability of Method:

Demonstration of the usefulness of the proposed methods using hypothetical or real data.

The panel will describe the strategies that have seemed most promising to date in supporting policymakers and practitioners in using rigorous research to inform decision-making. The lessons from the WWC experience will be relevant to other education researchers who aim to share their research findings beyond the research community. Those who work closely with practitioners and policy makers will learn about several resources to which they can direct non-researchers for information about rigorous research designs and standards tailored to specific audiences. And all attendees will gain an updated understanding of the priorities and products offered by the WWC and ways in which they can engage with the WWC.

Research Design:

Description of the research design.
(May not be applicable for Methods submissions)

Since the presentation is not original research, no research design is specifically used. The WWC reviews studies that use experimental, quasi-experimental, single-case, or regression-discontinuity designs.

Data Collection and Analysis:

Description of the methods for collecting and analyzing data. (May not be applicable for Methods submissions)

Not applicable.

Findings / Results:

Description of the main findings with specific details. (May not be applicable for Methods submissions)

Not applicable.

Conclusions:

Description of conclusions, recommendations, and limitations based on findings.

With all of the education research that has been and is being conducted, there's a wealth of information available to practitioners and policy-makers about what programs, practices, and policies show promise for increasing student achievement. The challenge is in distilling that research so that it is easy for a non-researcher to access, understand, and act upon. The WWC has played a critical role in translating research into practice since 2002. The WWC's new products, easy-to-use databases, and enhanced communication activities provide much-needed resources to assist non-researchers in finding research information meeting their needs, understanding and interpreting that research, and integrating the research information into practice. The wide range of strategies which the WWC is implementing to achieve these objectives are relevant to all education audiences as they seek to bridge the gap between research and practice.

Appendices *Not included in page count.*

Appendix A. References *References are to be in APA version 6 format.*

Appendix B. Tables and Figures

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Figure 1. Find What Works results for 5th grade math achievement Results. 4 Interventions found

Your filter Re	rs: Math (8 ∣ G	rade – 5 🗴	Positive	e or Potentially	Positive
Results by Outcome Domain	Research Details					
		SORT BY	Improvement inc	lex: high to low	Sort Print	

Jump to findings for: • Mathematics achievement

Mathematics achievement									
Intervention	Topic	Improvement Index	Effectiveness Rating	Extent Of Evidence					
Odyssey Math	Math (Elementary School)	-50 0 +50		Small					
Everyday Mathematics®	Math (Elementary School)	-50 0 +50		Small					
Saxon Math	Math (Elementary School)	-50 0 +50		Medium to Large					
Investigations in Number, Data, and Space®	Math (Elementary School)	-50 0 +50		Medium to Large					

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